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WEST DAVIS CORRIDOR

Wetland Update Summary
October 2012

Over the past two years, the West Davis Corridor EIS team has collected and analyzed information from much of western Davis and Weber County. Part of that effort has included studying wetlands. This summary will explain what wetlands are, why they are important, how our team has studied them over the course of this project, and how they have influenced the location of alternatives.

What Are Wetlands?

Wetlands are an important natural resource and are federally protected by the Clean Water Act. Besides being a beautiful part of the natural environment, wetlands act as flood control and water storage, as well as filters to help remove harmful contaminants from agricultural runoff, surface water, and ground water. In addition, they serve as habitat for a wide variety of wildlife.

The term "wetland" can be confusing because it does not simply mean land that is wet. To be a wetland, an area must have all of these characteristics:

Water — Water must be present at or near the surface for at least part of the growing season. Wetland scientists use the term "hydrology" when evaluating the prevalence of water.

Soils — Soils must be saturated long enough during the growing season to limit the amount of oxygen available to plants. The types of soil that support this state of saturation are called "hydric soils."

Vegetation — Only certain kinds of plants can thrive in an environment that is frequently flooded and lacks oxygen. The presence of these "hydrophytic plants" indicates the possible existence of a wetland.

The amount of water, the kind of soil, and the types of plants can vary, but a certain combination of all three must be present in order for an area to be classified as a wetland. In order to designate wetlands, scientists throughout the United States use the same set of rules, which are found in the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual and Regional Supplements. These manuals are recognized as the current authority on wetlands identification by both the Environmental Protection Agency and the Corps.

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Avoid, Minimize and Mitigate

Under Section 404 of the Clean Water Act, any action that places fill material into wetlands (such as building a new roadway) requires a permit from the U.S. Army Corps of Engineers. In order to obtain this permit, agencies must show they have first tried to avoid impacting wetlands. Then, they must demonstrate that they have minimized the amount of wetland impact. Finally, any remaining impacts must be properly mitigated.

History (2010 and 2011 Surveys)

Because wetlands are a federally protected resource, the West Davis Corridor EIS study has included a series of wetland surveys to determine where wetlands are located.

The first survey our team conducted was done at the beginning of the study in the spring of 2010 and looked at the entire study area, from Parrish Lane in Centerville all the way up to 12th Street in Ogden.

Because the study area was so large, wetland vegetation and hydrology were used to define potential wetland areas. This is the common practice around the country for large environmental studies. Once this initial wetland survey was complete, our team was able to proceed with alternatives development.

In February 2011, we had narrowed the possible alternatives down to three, and we shared these alternatives with the public. Many questions arose about the wetland areas we were showing on our maps. Our team was asked to look more closely at several specific areas of concern.

That spring, our biologists were sent into the field again to look more closely at certain areas. This survey was similar to what was done in 2010, looking at hydrology and vegetation. However, we were able to focus more closely on areas near the alternatives.

The 2011 wetland survey found that in some areas, there were more wetlands than we had estimated the previous year. In other areas, there were less wetland areas. These variations occurred because our biologists were able to look more closely in areas around our alternative alignments and not just a general assessment of the entire study area.

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Changes to the Alternatives Based on 2011 Survey

It was because of those changes in wetland areas that we took another look at the alternatives to see where we could make some shifts to further minimize impacts, not only to wetlands, but also to homes and farmland.

One of the areas where we estimated less wetlands was in West Kaysville. Because our new survey data showed less wetlands west of the power lines in this area than we previously estimated, we shifted the alignment to the west side of the power corridor. This shift allowed us to avoid directly impacting 17 homes in the West Kaysville area.

In Syracuse, the data showed more wetlands than we had previously estimated. This increase opened up some new refinements to Alternative B in Syracuse. We made a shift to Alternative B that had similar wetland and home impacts, but saved approximately 40 acres of prime and unique farmland.

Spring/Summer 2012 Survey Work

After our refinements were released, questions were still raised about the wetland survey work. Remember that at that time, the wetland data was based only on 2 of the 3 factors that classify a wetland – hydrology and vegetation. Knowing how critical it was to be certain on the wetland locations, and with the help of additional funding, the West Davis Corridor team decided to look at the 3rd factor in determining a wetland - the soil.

In the spring of 2012, our biologists once again went into the field to assess the wetland areas, but this time they were identifying any areas with hydric soil. In doing so, the biologists dug over 500 test holes to evaluate the hydric properties of the soils in the area.

Through these efforts, it was discovered that many of the areas previously determined to be wetlands did not contain the hydric soil properties to qualify as a wetland.

Our biologists also studied the source of any present water to determine whether it was natural or coming from somewhere else, such as irrigation runoff.

The new revised wetland data is now complete because it includes all three factors that make up a wetland: hydrology, vegetation, and soils. The soil component has proved to be very crucial in the West Davis Corridor study area. Seasonal and irrigation changes can cause yearly fluctuations in hydrology and vegetation, but it takes several years for a soil to develop hydric properties. This means that even though 2012 has been a dry year, it does not cause changes in the hydric properties of the soil.

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Effects of the Completed Study

With the new wetland data, the West Davis Corridor team has been able to make shifts to the alternatives to further minimize impacts. These alignment changes are available on the project website. The project team will now need to incorporate these new shifts and wetland information into the Draft Environmental Statement (DEIS), which will require additional time.

With these new changes, we anticipate that the DEIS will be released for public review in spring 2013. It is important to remember that no final decisions have been made on an alternative. A final decision will not be made until the study is complete and a final Record of Decision is approved by the Federal Highway Administration in 2014.

Wetland Survey Information for 2010, 2011 and 2012

All of our wetland study information can be found at www.udot.utah.gov/westdavis, under the Documentation Page. Select the Wetland tab to view all our wetlands documentation.

If you have any questions, please contact a member of the public information team by calling the project hotline at 877-298-1991 or sending an email to westdavis@utah.gov.